

Name: _____

Powers of Monomials

Simplify each monomial.

1 $(5a^3)^2$

2 $(-3z^{13})^3$

3 $(e^{13})^4$

4 $(n^4p^5)^6$

5 $(c^8)^7$

6 $(y^2)^6$

7 $(p^{19})^6$

8 $(2m^8n^{11})$

9 $(5x^5)^2$

10 $(5y^9z^{13})^2$

11 $(a^2b^3)^5$

12 $(-4c^{17})^4$

13 $(n^6)^8$

14 $(p^4q^2)^8$

15 $(n^{10})^{10}$

16 $(2m^3)^8$

17 $(10q^2)^3$

18 $(w^{19})^5$

Name: _____

Powers of Monomials

Answers

1 $(5a^3)^2$

$25a^6$

2 $(-3z^{13})^3$

$-27z^{39}$

3 $(e^{13})^4$

e^{52}

4 $(n^4p^5)^6$

$n^{24}p^{30}$

5 $(c^8)^7$

c^{56}

6 $(y^2)^6$

y^{12}

7 $(p^{19})^6$

p^{114}

8 $(2m^8n^{11})$

$4m^{16}n^{22}$

9 $(5x^5)^2$

$25x^{10}$

10 $(5y^9z^{13})^2$

$25y^{18}z^{26}$

11 $(a^2b^3)^5$

$a^{10}b^{15}$

12 $(-4c^{17})^4$

$256c^{68}$

13 $(n^6)^8$

n^{48}

14 $(p^4q^2)^8$

$p^{32}q^{16}$

15 $(n^{10})^{10}$

n^{100}

16 $(2m^3)^8$

$256m^{24}$

17 $(10q^2)^3$

$1000q^6$

18 $(w^{19})^5$

w^{95}